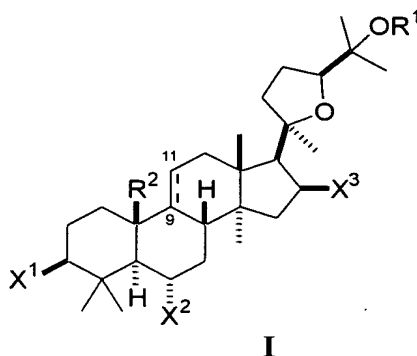


**Amendments to the Claims**

1. (Original) A method of increasing telomerase activity in a cell or tissue,  
5 comprising: identifying a cell or tissue in which an increase in telomerase activity is desired, and contacting said cell or tissue with a formulation of an isolated compound of formula I:



where:

- 10 each of  $X^1$ ,  $X^2$ , and  $X^3$  is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside;  
 $OR^1$  is selected from hydroxy, lower alkoxy, lower acyloxy, and a glycoside;  
wherein any of the hydroxyl groups on said glycoside may be substituted with a further glycoside, lower alkyl, or lower acyl, such that the compound includes a  
15 maximum of three glycosides; and  
 $R^2$  is methyl and  $----$  represents a double bond between carbons 9 and 11; or,  $R^2$  forms, together with carbon 9, a fused cyclopropyl ring, and  $----$  represents a single bond between carbons 9 and 11.

- 20 2. (Original) The method of claim 1, wherein said compound includes zero, one, or two glycosides, none of which is substituted with a further glycoside.
3. (Original) The method of claim 2, wherein said compound includes zero or two glycosides, none of which is substituted with a further glycoside.
- 25 4. (Original) The method of claim 1, wherein each said glycoside, when present,

is of the D configuration.

5 5. (Original) The method of claim 1, wherein  $R^2$  forms, together with carbon 9, a fused cyclopropyl ring; and ---- represents a single bond between carbons 9 and 11.

10 6. (Original) The method of claim 2, wherein each of  $X^1$  and  $X^2$  is independently selected from hydroxy, lower alkoxy, lower acyloxy, and a glycoside, and  $X^3$  is selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside.

7. (Original) The method of claim 2, wherein  $X^1$  is OH or a glycoside, each of  $X^2$  and  $OR^1$  is independently OH or a glycoside, and  $X^3$  is OH or keto.

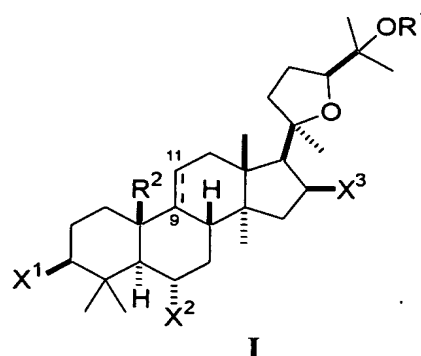
15 8. (Original) The method of claim 2, wherein the compound is selected from astragaloside IV, cycloastragenol, astragenol, astragaloside IV 16-one, cycloastragenol 6- $\beta$ -D-glucopyranoside, and cycloastragenol 3- $\beta$ -D-xylopyranoside.

20 9. (Original) The method of claim 8, wherein the compound is selected from astragaloside IV, cycloastragenol, astragenol, and astragaloside IV 16-one.

10. (Original) The method of claim 9, wherein said compound is astragaloside IV.

11-29. (Cancelled)

25 30. (Currently amended) A pharmaceutical or nutraceutical composition comprising, in a pharmaceutically or nutraceutically acceptable vehicle, respectively, a compound of formula I:



where:

each of  $X^1$ ,  $X^2$ , and  $X^3$  is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside;

5 ~~each of  $X^1$  and  $X^2$  is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside;~~

~~$X_3$  is keto;~~

$OR^1$  is selected from hydroxy, lower alkoxy, lower acyloxy, and a glycoside;

wherein any of the hydroxyl groups on said glycoside may be substituted with a  
 10 further glycoside, lower alkyl, or lower acyl, such that the compound includes a maximum of three glycosides; and

$R^2$  is methyl and ---- represents a double bond between carbons 9 and 11; or,  $R^2$  forms, together with carbon 9, a fused cyclopropyl ring, and ---- represents a single bond between carbons 9 and 11.

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31. (Original) The composition of claim 30, wherein said compound includes zero, one, or two glycosides, none of which is substituted with a further glycoside.

32. (Original) The composition of claim 30, wherein each said glycoside, when  
 20 present, is of the D configuration.

33. (Original) The composition of claim 30, wherein  $R^2$  forms, together with carbon 9, a fused cyclopropyl ring; and ---- represents a single bond between carbons 9 and 11.

25

34. (Original) The composition of claim 30, wherein  $X^1$  is OH or a glycoside, and

each of  $X^2$  and  $OR^1$  is independently OH or a glycoside.

35-82. (Cancelled)

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83. (New) The composition of claim 30, wherein said composition is a nutraceutical composition.

84. (New) The composition of claim 30, wherein said composition is a pharmaceutical composition.

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85. (New) The composition of claim 30, wherein the compound is selected from astragaloside IV, cycloastragenol, astragenol, astragaloside IV 16-one, cycloastragenol 6- $\beta$ -D-glucopyranoside, and cycloastragenol 3- $\beta$ -D-xylopyranoside.

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86. (New) The composition of claim 30, wherein each of  $X^1$  and  $X^2$  is independently selected from hydroxy, lower alkoxy, lower acyloxy, keto, and a glycoside; and  $X_3$  is keto.

87. (New) The composition of claim 86, wherein the compound is astragaloside IV 16-one.

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88. (New) The method of claim 9, wherein the compound is cycloastragenol.

89. (New) The method of claim 9, wherein the compound is astragenol.

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90. (New) The method of claim 9, wherein the compound is astragaloside IV 16-one.